

South Dakota State University
**Open PRAIRIE: Open Public Research Access Institutional
Repository and Information Exchange**

The Jackrabbit Dairy Review

Dairy Science

Winter 2008

The Jackrabbit Dairy Review

Vikram Mistry

South Dakota State University, Vikram.Mistry@sdstate.edu

Follow this and additional works at: http://openprairie.sdstate.edu/dairy_review



Part of the [Dairy Science Commons](#)

Recommended Citation

Mistry, Vikram, "The Jackrabbit Dairy Review" (2008). *The Jackrabbit Dairy Review*. Paper 9.
http://openprairie.sdstate.edu/dairy_review/9

This Newsletter is brought to you for free and open access by the Dairy Science at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in The Jackrabbit Dairy Review by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

THE JACKRABBIT DAIRY REVIEW

Winter 2007-2008

Dairy Science Department, SDM 109, South Dakota State University, Brookings, SD 57007

Dairy Science Department

Faculty

Sanjeev Anand, Assistant Professor
Robert Baer, Professor
Howard Bonnemann, Instructor/Dairy Plant Manager
Alvaro Garcia, Associate Professor/Extension Dairy Specialist
Ashraf Hassan, Associate Professor
David Henning, Associate Professor Emeritus
Arnold Hippen, Professor
Kenneth Kalscheur, Associate Professor
Matthew Laubach, Manager, Dairy Research & Training Facility/Lecturer
Lloyd Metzger, Associate Professor, Alfred Chair in Dairy Education
Vikram Mistry, Professor and Head
Rajinder Nauth, Adjunct Professor
John Parsons, Professor and Head Emeritus
David Schingoethe, Distinguished Professor

Staff

Jill Anderson, Research Assistant
Ananya Biswas, Microbiologist, State Dairy Lab
Valerie Denison, Secretary
Kevin Gross, Assistant Manager, Dairy Research & Training Facility
Oliver Janevski, Visiting Fulbright Researcher
Gary Kirkham, Ag Foreperson/Lead Feed
Pete Linke, Ag Foreman/Transition/Fresh and Sick Cows/Calf Care
Anne Owens, Secretary
Jayne Raabe, Senior Secretary
Huimin Zhang, Research Associate

Graduate Students

Dairy Production

Malek Abdelqader
Keith Christen
Peter Linke
Kamal Mjoun
Colleen Mulrooney
Rosemary Nyoka
*Todd Owens
Benjamin Pamp
Sanjeeva Ranathunga

Dairy Manufacturing

Akimoto Ichinomiya
Nirupama Nigam
*Ashish Pandit
Darshan Purohit
*Prafulla Salunke
Himanshu Somni
Deepa Subramanian
*New students in 2007

MESSAGE FROM THE DEPARTMENT HEAD

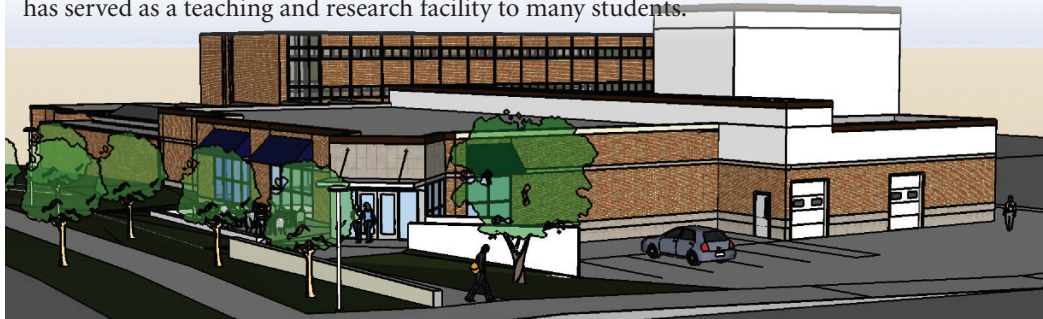
2007 was a great year to be a part of the dairy industry. By some accounts 2007 marked a century of existence of the Dairy Science Department in its present format. Milk production and profitability, and cow numbers saw increases in this region. One of our own Holsteins became the top milk producer in the State. Our faculty members were recognized at the local and national levels through awards of merit, awards of research grants, and promotion and tenure. During the last fiscal year our faculty obtained approximately \$350,000 in grants for research. Our undergraduate student numbers were back to 70 for the first time in about 14 years and we will continue our recruitment efforts. Thanks to the generous support of alums, industry and friends, our students were awarded a total of \$60,000 in scholarships. Employment opportunities for our graduates are excellent at 100%. Eleven companies visited the department and conducted 115 interviews during 2007. Several students received multiple job offers with outstanding starting salaries. Industry commitment through the Jackrabbit Dairy Council and Heifers for State has taken us to a new level of collaboration and integration within the dairy industry. With the immense commitment from the Jackrabbit Dairy Council that includes dairy farmers and dairy processors, we are nearing ground breaking for beginning construction of the new dairy plant. In January 2007 Dr. David Chicoine became the 19th President of SDSU and he has brought a high level of excitement to campus. Importantly for us, he has identified the Dairy Science program as a "Spire of Distinction" for SDSU. This distinct recognition has injected immense enthusiasm within the Department and will serve as the guiding light for us in the coming years. I invite you to join us to together build the dairy industry.



Vikram Mistry

DAIRY PLANT RENOVATION

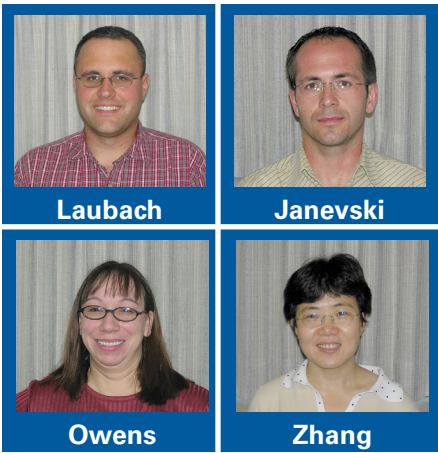
The Architectural and Engineering firm that includes TSP Architects and Mead and Hunt, Jackrabbit Dairy Council members, Dairy Science Department, SDSU Facilities and Service Engineers, and the Office of the SD State Engineer began developing plans for the new dairy plant in May. The net estimated cost of the project is \$10.4 million, approximately equally split between building and equipment. Legislative approval will be sought in spring'08 for increasing the spending authority above the original \$4 million. Finalization of design and fund raising is in progress and ground-breaking is expected within the next year. We are also nearing the completion of agreements with Dairy Management Inc. to enable the formation of an Institute of Dairy Ingredient processing. This component within the new dairy plant will make it possible to develop concentrated and dried products in a manner that can be readily scaled up to a commercial level. The new dairy plant will replace the existing 45-year old plant that has served as a teaching and research facility to many students.



The Jackrabbit Dairy Council includes

American Dairy Association of SD • Midwest Dairy Association
Davisco Foods International • Ecolab • Glanbia Foods USA • Tetra Pak CPS
SA Education Foundation • SDSU • Valley Queen Cheese • Wells' Dairy

NEW FACULTY AND STAFF



Matthew Laubach began his appointment as Manager of the Dairy Research and Training Facility/Lecturer in August 2007. Matt holds a B.S. degree in Agricultural Systems Management and M.S. in Nutrition Physiology/Dairy Nutrition. Both degrees are from North Dakota State University. Prior to his appointment at SDSU, Matt was the Farm Operations Coordinator in the Department of Animal and Range Sciences at NDSU. He also coached the Intercollegiate Dairy Challenge team at NDSU and served as the Bison Dairy Club advisor. In his new position at SDSU, Matt is responsible for managing the SDSU dairy farm, supervise employees and teach various courses in dairy production. In addition, he will also coach the dairy cattle judging team.

Oliver Janevski is a Visiting Fulbright Scholar. He holds a D.V.M., from the University of Ss. Cyril and Methodius, Skopje, Macedonia. At SDSU he will work in the area of dairy product processing and safety under Drs. Lloyd Metzger and Sanjeev Anand.

Anne Owens began her appointment as Secretary in the dairy plant in September 2007. She holds a BA from the University of Northern Iowa, Cedar Falls, IA. She will be the sales and marketing supervisor for the Dairy Sales Bar.

Huimin Zhang was appointed as Research Associate in summer 2007. She holds B.S., Horticulture from Shanxi Agricultural University, Taigu, China, M.S., Health Sciences from Curtin University of Technology, Perth, Australia, and M.S., Food Science from China Agricultural University, Beijing, China. She is in the process of completing her Doctorate in Food Science from North Dakota State University. At SDSU she will work under the direction of Dr. Lloyd Metzger in the Alfred Laboratory.

UNDERGRADUATE STUDENTS

Dairy Production

- Peter Beck, Princeton, MN
- Rachel Becker, Eden Valley, MN
- *Holly Bruns, LaFayette, MN
- *Katelyn Crocker, Merrifield, MN
- Andrew Doll, New Salem, ND
- *Michael Donnelly, Farmington, MN
- *Andrea Hoffman, Cleveland, MN
- *Sarah Hunt, Elkton, SD
- *Heather Jons, Bonesteel, SD
- Joseph Kennedy, Beresford, SD
- Timothy Korver, Alton, IA
- Gerben (Gary) Landman, White, SD
- *Melissa Lax, Sleepy Eye, MN
- Craig Niemann, Clear Lake, SD
- Brittany Nussbaum, Garretson, SD
- *Stephanie Nussbaum, Garretson, SD
- *Rachel Patrick, Eatonton, GA
- Heather Rollefson, Sibley, IA
- Kraig Schleusner, Watertown, SD
- Graisson Schmidt, Melrose, WI
- Ashley Schroeder, Castle Rock, MN
- *Cody Schlecht, Canby, MN
- Eric Schultz, Rollingstone, MN
- Brian Speltz, Plainview, MN
- Ryan Tollefsrud, Murdock, MN

- Steven Vandyke, Elkton, SD
- Kaitlin Van Eck, Ruthton, MN
- Abigail Wirt, Lewiston, MN

Dairy Manufacturing

- Kirby Athey, Big Stone City, SD
- Tori Boomgaarden, Pipestone, MN
- Jared DeNoble, Hills, MN
- *Jordan Dorneman, Milbank, SD
- Derek Griesse, Harrisburg, SD
- Kara Gutormson, Maddock, ND
- *Rebecca Hanson, Brandon, SD
- Travis Holscher, Twin Brooks, SD
- Laura Kennedy, Beresford, SD
- Jonah King, Volga, SD
- Jake Kregelberg, Le Sueur, MN
- *Sietse Landman, White, SD
- Sam Metzger, Alvord, IA
- Sarah Morrison, Florence, SD
- Kathryn Norling, Beresford, SD
- *Molly Paterson, Marshall, MN
- *Morgan Petersen, Cokato, MN
- Stephen Plucker, Chancellor, SD
- Isaac Randall, Dell Rapids, SD
- *Daniel Ross, Marshall, MN
- Mike Schmit, Howard, SD

- *Tricia Schuller, Alcester, SD
- Emily Stephenson, Rapid City, SD
- *Nicole Stevens, Pipestone, MN
- Thomas (T.J.) Swartos, Volga, SD
- Cassey Utke, Brandon, SD
- Wendy Weber, Sioux Falls, SD
- Rebecca Wirt, Lewiston, MN
- *Cory Zelfel, Kennard, NE

Dairy Prod/Manuf Double Majors

- Kimberly Allen, Page, NE
- Jessica Berg, Baltic, SD
- Michael Dunn, Vale, SD
- *Rachel House, Whittier, CA
- Jenna Mueller, Big Stone City, SD
- Alex Ode, Brandon, SD
- John Temme, Wayne, NE
- Samantha Wahls, Postville, IA
- *New students in 2007



HEIFERS FOR STATE

The 2007 Heifers for State Sale was held in conjunction with the Central Plains Fall Sale in October on the SDSU campus. Dairy Club members set up the arena, prepared cattle, and showed cattle to buyers during the sale. Several generous producers donated animals for the second Heifers for State program. Donors included Cal Graber, Marv Post, Mike Crinion, John VanderWeerd, Troy Zoellner, Edward Kavanaugh, Howard Manlove, Lynn Boadwine, John Metzger and Brad DeBoer. The donated animals and embryos raised a total of \$10,150 that will be used for supporting dairy education and research programs at SDSU. The Heifers for State program began in 2006. This partnership will continue in the spring when we expect to host a Dairy Day in June. On this day faculty and students will showcase Dairy Science programs and provide tours of facilities. We invite you to consider becoming a future donor to the Heifers for State program and an investor in the future of the dairy industry.



STATE DONORS

- Graber Jerseys, Inc. (Cal Graber) • Post Dairy (Marv Post)
- Valley View Dairy (Mike Crinion, Marv Post, and John VandeWeerd)
- Al Shar Holsteins (Troy Zoellner) • K.C. Dairy (Edward Kavanaugh)
- Midwest Dairy Institute (Howard Manlove)
- Boadwine Farms Inc. (Lynn Boadwine) • Trans Ova (John Metzger)
- DeBoer Holsteins (Brad DeBoer).

2007 GRADUATES

B.S. Manufacturing

Kinsey Antonsen, Leprino Foods, Allendale, MI
 Richard DeRouchey, University of Guelph (graduate school), Guelph, Canada
 Garrett Doucette, Kemps. LLC, Rochester, MN
 Travis Holscher, Valley Queen Cheese, Milbank, SD
 Sam Metzger, Roberts Dairy, Omaha, NE
 Jenna Mueller, Graduate School, SDSU
 Jason Nissen, Kemps, LLC, Cederberg, WI
 Betsy Raasch, Land O'Lakes, Arden Hills, MN
 Rebecca Wirt, Ecolab, Eagan, WI

B.S. Production

Bradley Korver, Home Farm, Alton, IA
 Thomas Norling, Genex, Beresford, SD
 Janora Smith, Land O' Lakes, Merrill, IA

M.S.

Mini Bharathan, Dairy Production, Ph.D., Virginia Tech.
 Kamal Mjoun, Dairy Production, Ph.D. SDSU

Ph.D.

Gaolabale Mpapho, University of Botswana.

JUDGING ACTIVITIES



Dairy Cattle & Production

Dairy Science students participated in the Midwest Regional Intercollegiate Challenge in Fond du Lac, WI. Participating students included Peter Beck, Brad Korver, Gerben Landman, Craig Niemann, Heather Rollefson, Jared Schaffer, Janora Smith, John Temme, and Ryan Tollefsrud. Dr. Arnold Hippen served as coach. Heather Rollefson and Janora Smith were members of teams that were selected as Platinum performers, the contest's highest distinction.

Our cattle judging team consisting of Abbie Wirt, Jessica Berg, John Temme and Tim Korver participated at the Accelerated Genetics Intercollegiate Dairy Judging Contest in Viroqua, WI and North American International Livestock Exposition contest in Louisville, KY. In Viroqua our team placed 9th overall and in Louisville they placed 4th overall. Abbie was 11th high individual and Jessica was 4th high individual. The teams were coached by Matt Laubach.

Dairy Products

The Dairy Products Judging Team placed 1st at the Midwest Regional Contest. Team members were Tori Boomgaarden, Derek Griesse, Jonah King, and Ashish Pandit. At the National Collegiate Dairy Products Judging Contest which was held in Las Vegas the team placed 3rd overall. Jonah King placed first overall in the contest and was invited to the Quality Chek'd meeting in Dallas, TX in April 2008. Derek Griesse placed first overall in Cheddar and has been invited to participate in the World Championship Cheese Contest in Madison, WI in March 2008. The team was coached by Dr. Bob Baer.



PRESIDENT CHICOINE'S DAIRY TOUR OF SOUTH DAKOTA

In August 2007 Dr. David Chicoine, President of SDSU and Dr. Gary Lemme, Dean of the College of Agriculture and Biological Sciences, received a glimpse of the dairy industry of South Dakota through a 200 mile trip that included visits to three dairy farms and three plants. Joining as guests were Don Guthmiller and Rebecca Schafer of the SDSU Cooperative Extension Service. Stops on the trip included Davisco Foods, Lake Norden; Valley Queen Cheese, Milbank; Midwest Dairy Institute, Milbank; Global Dairy, Estelline; and the SDSU dairy plant and farm. Hosts at each stop provided an excellent perspective on their own operations through tours and discussions as well as the state of the art in the dairy industry today. A total of 12 alums of the Dairy Science department who are serving as employees and several existing students and employees of the Dairy Science Department also participated in the visits. Discussions ranged from the state of the art at each farm and processing facility to the future of the industry, role of research and education, to how and why Mozzarella stretches, how cross ventilation in a dairy barn works, what is a probiotic cheese, and many other stimulating topics.



PROFESSIONAL ACTIVITIES OF FACULTY AND STAFF

Faculty and students together presented over 60 papers including refereed publications in scientific journals, abstracts, presentations, book chapters, extension publications, thesis or dissertations, and several extension presentations. All publications are listed at <http://dairysci.sdstate.edu>.

ACTIVITIES

Dr. Sanjeev Anand was selected by the Food and Agriculture Organization of the United Nations to serve as an expert on Joint FAO/WHO Expert Committee on Food Additives, contaminants and natural toxins (JECFA) for the period 2007-2011. Dr. Anand is also a member of the Food Safety Committee of the ADSA.

Howard Bonnemann served as secretary/treasurer of the South Dakota Dairy Association. He conducted several dairy product judging clinics for South Dakota high schools.



Garcia

Dr. Alvaro Garcia was presented the F. O. Butler Award at the December commencement in recognition of his outstanding accomplishments as Extension Dairy Specialist. Dr. Garcia conducted several Extension activities in Honduras, El Salvador, and Uruguay. He also once again

offered a Dairy Spanish class.



Hassan

Dr. Ashraf Hassan has been promoted to Associate Professor effective 1st July 2007. Dr. Hassan has been a faculty member in Dairy Science at SDSU since July 2003 and is responsible for teaching and research in Dairy Manufacturing. He has developed a strong research program in the area of low

fat cheese technology, in particular investigating the applications of cultures producing exopolysaccharides for improving the quality of low fat cheeses. His expertise in the application of electron microscopy is well recognized. His research work is supported by the Midwest Dairy Foods Research Center, US-Egypt Joint Science Technology Board (USDA-FAS) program and others. Dr. Hassan spent two months as an exchange faculty member in the Dairy Science Department at Chungnam National University in Korea.



Hippen

Dr. Arnold Hippen has been promoted to Professor of Dairy Science effective 1st July 2007. He has been a Dairy Science faculty member since 1998 when he joined as Assistant Professor under the David H. Henry sustained Professorship. Dr. Hippen has been involved in teaching 6 Dairy

Production classes. His research is in the area of dairy cattle nutrient management influencing productivity and production efficiency, nutrient management, and general management strategies. He is an active participant in multi-state regional projects, NC 1009, Metabolic relationships of nutrients and NC 1119, Management systems to improve the economic and environmental sustainability of dairy enterprises. Dr. Hippen received the 2007 SDSU Gamma Sigma Delta Research Award. He serves as chair of Institutional Animal Care and Use Committee of SDSU. He also served as Chair of the Physiology Section for ADSA and ASAS National Meetings this past year and serves as a member of the Midwestern Regional Dairy Challenge Planning Committee.



Kalscheur

Dr. Kenneth Kalscheur was granted Tenure in Dairy Science effective 1st July 2007. He joined the Dairy Science Department in 2001 as Assistant Professor. Dr. Kalscheur is involved in teaching six courses in Dairy Production. Dr. Kalscheur's research program focuses on dairy cattle nutrition,

especially in the area of distillers grains research as well as on environmental issues; improving nutrient utilization in dairy cattle to reduce nutrient excretion. Dr. Kalscheur is also an active participant on a NC multi-state research project; NC-1119, Management Systems to Improve the Economic and Environmental Sustainability of Dairy Enterprises. Dr. Kalscheur spent 4 months as an Exchange Professor at Chungnam National University, South Korea.

Dr. Lloyd Metzger serves as the Director of the Midwest Dairy Foods Research Center and the Executive Secretary of the North Central Cheese Industries Association.

Dr. Vikram Mistry served as the US editor of the French Journal of Dairy Science and Technology, Le Lait and Associate Director of the Midwest Dairy Foods Research Association.



Schingoethe

Dr. Dave Schingoethe is an Editor of Journal of Dairy Science (ADSA). He was recognized as Fellow of the American Dairy Science Association at the annual meeting in San Antonio, TX. This award came in recognition of his long standing service to the ADSA over the past 35 years.

NEW AND ONGOING FUNDS FOR SUPPORTING RESEARCH AND OTHER PROGRAMS

Anand, S. K. New start up funds. 9/1/2007 to 3/1/2008. Vice President Peterson and New Start-up Funds - VPAA. \$8,500; Manufacture of cheese enriched with conjugated linoleic acid. 1/1/2007 to 12/31/2008. \$56,154.

Baer, R. J. \$4,000 from the Food Processing Suppliers Association to support the products judging team.

Garcia, A. D. Producer surveys and outreach/extension programs for livestock producers. 5/1/2007 to 4/30/2012. USDA/Agricultural Research Service. \$18,000 per year.

Hassan, A. Expanding the use of whey in food and increase in food safety. 9/1/2004 to 8/31/2007. USDA-FAS. \$30,000; Improvement of the texture and functionality of reduced fat Process cheese. 1/1/2005 to 12/1/2007. Midwest Dairy Foods Research Center. \$89,224.

Hassan, A., Dwivedi, C. (Pharmacy). Chemopreventive effects of exopolysaccharides produced by yogurt cultures on tumor development. 9/1/2006 to 8/31/2008. AES - In House. \$20,000.

Hegerfeld, J., Henning, D. R., Anand, S. K., Krishnan, P., Burrows, R. Study of the reduction of foodborne risks associated with direct marketed foods in South Dakota. 9/15/2003 to 9/14/2007. USDA-CSREES. \$500,000.

Hippen, A. R., Hassan, A., Abd El-Salam, M. H. Production of novel probiotic dairy products rich in conjugated linoleic acid. 3/1/2006 to 2/28/2008. US Egypt Joint Board. \$27,000.

Hippen, A. R., Kalscheur, K. F. Effect of Silaferm treatment of corn silage on milk production, milk composition, and lactation performance of dairy cows. 12/1/2007 to 11/30/2009. Ajinomoto USA, Inc. \$32,547.

Hippen, A. R., Kalscheur, K. F., Schingoethe, D. J. Corn distillers grains and nonstructural carbohydrate dietary interactions

continued on page 5

NEW AND ONGOING FUNDS FOR SUPPORTING RESEARCH AND OTHER PROGRAMS *(continued)*

on production and milk fatty acid composition from dairy cows fed Monensin. 3/1/2007 to 3/1/2009. Elanco Animal Health. \$65,019; New uses of distillers grains products in dairy cattle feeding. 5/1/2007 to 4/30/2012. USDA/Agricultural Research Service. \$80,000 per year.

Hippen, A. R., Rennich, D. D., Kalscheur, K. F., Schingoethe, D. J. XPC in dairy cow diets which contain dried distillers grains plus solubles. 5/15/2006 to 5/15/2008. Diamond V. Mills, Cedar Rapids, IA. \$28,000.

Hippen, A. R., Schingoethe, D. J., Kalscheur, K. F. Glycerol, a coproduct of biodiesel production: Effects on rumen fermentation and metabolism when fed to dairy cows. 7/1/2005 to 6/30/2007. IFFCO (Malaysia). \$6,000.

Hippen, A. R., Schingoethe, D. J., Kalscheur, K. F., Garcia, A. D., Abdelqader, M. The feeding value of corn germ compared with corn distillers grains in dairy cow diets. 1/10/2006 to 6/6/2007. SD Corn Utilization Council. \$31,445.

Kalscheur, K. F., Hippen, A. R. Effect of feeding a protected source of calcium chloride on dry matter intake and urine pH of dry dairy cows. 4/1/2007 to 3/31/2008. Hubbard Feeds Inc. \$4,864.

Kalscheur, K. F., Hippen, A. R., Schingoethe, D. J. Amino acid utilization of dairy cows fed increasing concentrations of dried

distillers grains. 1/6/2006 to 6/30/2007. SD Corn Utilization Council. \$32,620; Enhancement of the nutritional qualities of milk via the favored dairy program. 10/11/2006 to 9/30/2008. Favored Dairy Operations. \$38,279; Evaluation of low-fat distillers grains in dairy cow diets. 6/7/2007 to 5/31/2009. VeraSun Energy Corporation. \$77,282.

Kalscheur, K. F., Schingoethe, D. J. Combustion analyzer to determine nitrogen of ethanol co-products fed to dairy cattle. 11/1/2006 to 10/31/2007. USDA/CSREES. \$19,393.

Metzger, L. E. Low fat/fat free process cheese for slice-on-slice applications. 1/1/2007 to 12/31/2007. Dairy Management Inc. \$64,378.

Mistry, V. V., Nauth, R. Development of food-grade organisms for antimicrobial production. 2/1/2006 to 1/31/2008. B. L. Ingredients. \$57,944.

Mistry, V. V., Somni, H. Manufacture of concentrated whey proteins in their native form/state using membrane processing and their characterization. 1/1/2007 to 12/31/2008. Midwest Dairy Foods Research Center. \$63,856.

Schingoethe, D. J., Hippen, A. R., Kalscheur, K. F. Canola meal in place of distillers grains for lactating dairy cows. 1/1/2007 to 8/31/2008. Canola Council of Canada. \$28,314; Condensed corn distillers solubles with fish oil as a value-added feed for dairy cows. 7/1/2006 to 6/30/2007. SD Corn Utilization Council. \$32,580.

STUDENT ACCOMPLISHMENTS

Katie Norling, Dairy Manufacturing major was selected as the SD Dairy Princess for 2007-2008. **Stephanie Nussbaum**, Dairy Production student, was selected as runner-up.

Rachel Patrick, Dairy Production freshman and owner, operator of His-Grace Holsteins of Eatonton, GA was presented a National Agri-Entrepreneurship Award at the 80th National FFA Conventional in Indianapolis, IN.

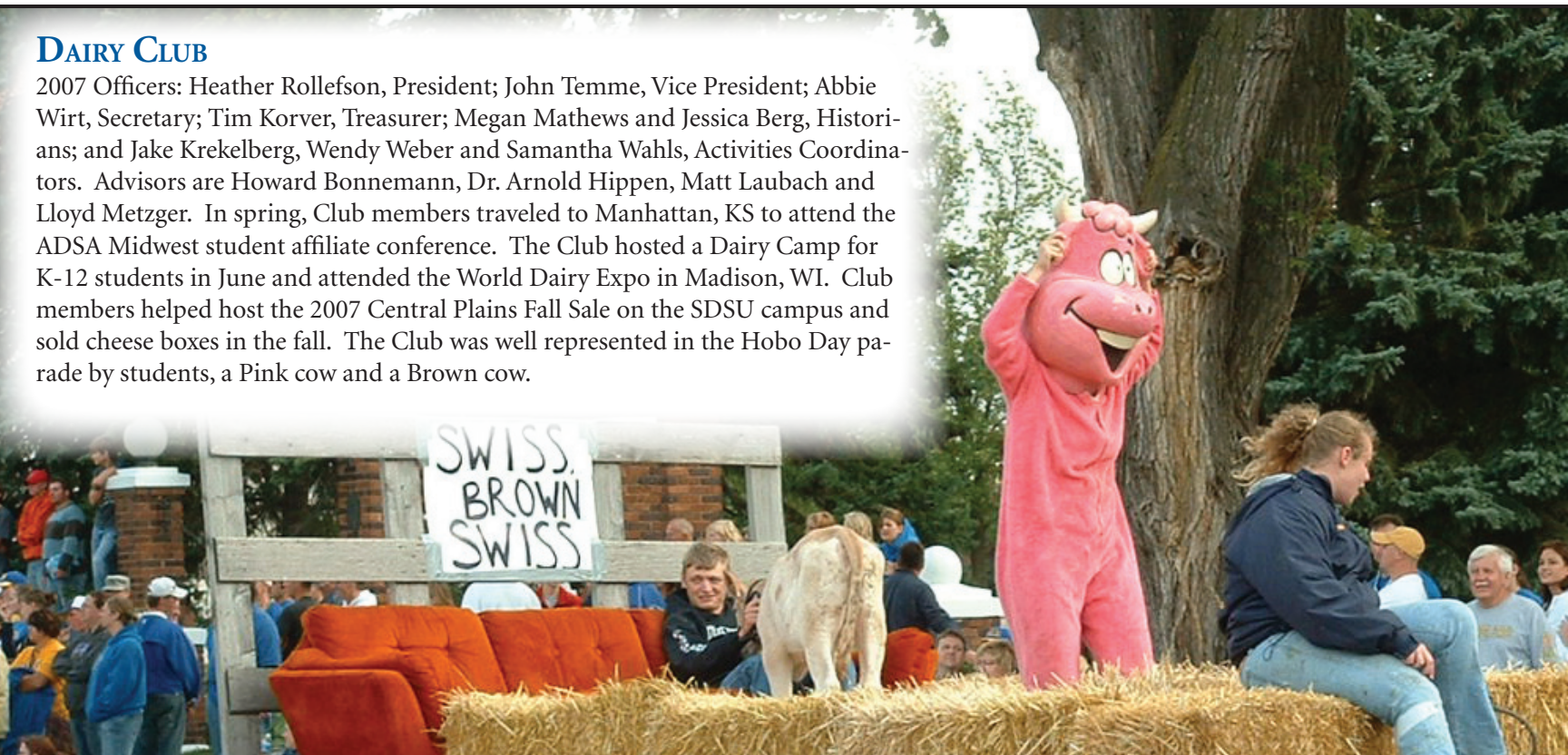
Brittany Nussbaum, junior Dairy Production major served as the National Postsecondary Agricultural Student (PAS) Organization President.

Ashley Schroeder Dairy Production major traveled to Edinburgh, Scotland in June 2007 to compete in the International Dairy Judging Contest.

Wendy Weber served as AgBio Ambassador. As an Ambassador, Wendy is promoting the SDSU College of Agriculture and Biological Sciences to prospective students.

DAIRY CLUB

2007 Officers: Heather Rollefson, President; John Temme, Vice President; Abbie Wirt, Secretary; Tim Korver, Treasurer; Megan Mathews and Jessica Berg, Historians; and Jake Krekelberg, Wendy Weber and Samantha Wahls, Activities Coordinators. Advisors are Howard Bonnemann, Dr. Arnold Hippen, Matt Laubach and Lloyd Metzger. In spring, Club members traveled to Manhattan, KS to attend the ADSA Midwest student affiliate conference. The Club hosted a Dairy Camp for K-12 students in June and attended the World Dairy Expo in Madison, WI. Club members helped host the 2007 Central Plains Fall Sale on the SDSU campus and sold cheese boxes in the fall. The Club was well represented in the Hobo Day parade by students, a Pink cow and a Brown cow.



SCHOLARSHIPS

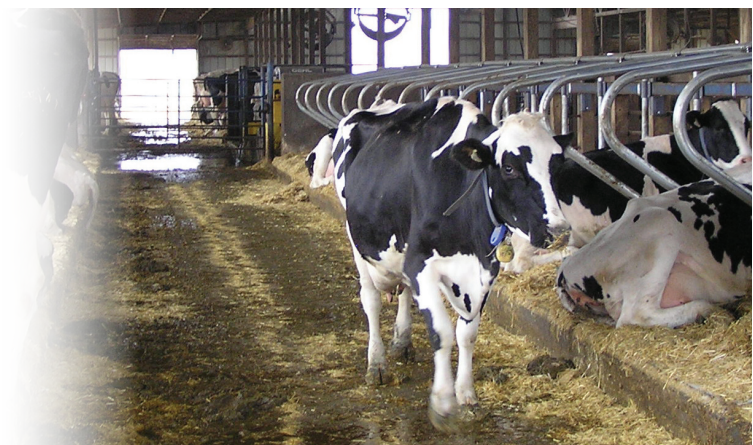
Thanks to the generosity of many alumni and industry our students continue to be supported through scholarships. At the spring 2007 banquet, 71 scholarships and awards totaling approximately \$60,000 were presented. The 2007 scholarships were as follows:

John Anderson Memorial	\$1000	Joe E. Schuch (2 @ \$1000 each)	\$2000
Associated Milk Producers, Inc.	\$1000	Shirley Seas Memorial	\$750
Ross Baker Memorial	\$800	SD State Dairy Association (4 @ \$1000 each)	\$4000
Emery Bartle Memorial	\$4000	Todd and Erica Stahl	\$1000
Dairy Club (2 @ \$250 each)	\$500	Valley Queen Cheese Factory	\$2500
Dairy Farmers of America	\$400	Joseph Van Treeck	\$1000
Dairy Science Department	\$1250	Wells Family Foundation	\$1000
Danisco (2 @ \$1,000 each)	\$2000	Walt and Yvonne Wosje	\$1000
David H. Henry Memorial	\$350	JJ Yee Scholarship	\$500
Davisco Foods Int'l, Inc.	\$750	Awards	
Dean Foods - Land O'Lakes	\$1000	D. F. Breazeale Memorial	\$650
Derdall	\$500	Dairy Judging Manufacturing	\$150
Gilbert T. & Olga Gilbertson Memorial	\$750	Dairy Judging Production	\$150
John C. Gross	\$1000	Forbes Leadership	\$300
Susan Hawkins	\$1000	Grabber-Ford	\$125
Clyde Helsper Memorial	\$500	Students Employee Excellence (2 @ \$250)	\$500
Kemps LLC	\$1500	Alfred Tobkin Memorial (4 @ \$150 each)	\$600
Land O'Lakes-Region 65	\$500	Howard Voelker Memorial (4 @ \$150 each)	\$600
James Marvel Memorial	\$600	Virginia Dare	\$250
Kirk Mears Memorial	\$1800		
North Central Cheese Industries Association		Incoming Students Scholarships	
(2 @ \$1500, 1 @ \$1200)	\$4200	Dairy Science Faculty (2 @ \$1100 each)	\$2200
Nordica Licensing Inc.	\$500	William & Marge Kallemeyn & Sons (2 @ \$1000 each)	\$2000
H. C. Olson	\$850	Midwest Dairy Assn/SD Division (2 @ \$750)	\$1500
T. M. Olson	\$1000	SD Dairy Fieldmen's Association (5 @ \$750)	\$3750
Alfred Hermann Rishoi (2 @ \$1000 each)	\$2000	Clyde G. Helsper Dairy Fieldmen's	\$750
Ralph Rogers Memorial	\$400	Valley Queen Cheese Factory	\$1000
Saputo Cheese	\$1000	Royal and Helen Donor in Dairy Production	\$600

Dairy Science students won 7 of the 20 scholarships awarded by the National Dairy Promotion and Research Board in nation-wide competition. Students were Peter Beck, Tori Boomgarden, Jared DeNoble, Jenna Mueller, Eric Schultz, and Ryan Tollefsrud. Abbie Wirt was the recipient of the top award of this program, the Loper award.

DAIRY RESEARCH AND TRAINING FACILITY UPDATE

Our dairy farm has approximately 129 certified and registered milking cows and a total of 300 animals. This includes approximately 50 Brown Swiss. The rolling herd average is just over 25,000 pounds per year. One of our Holsteins was reported to be the top milk producer in the State. The facility serves as a site for research and teaching programs, the annual Dairy Camp, and cattle judging contests for the FFA Convention and Little-I. Tiana Schuster and John Temme are student managers. Through extensive support of the SD Agricultural Experiment Station the facility is undergoing renovations in several areas to help strengthen the research programs. Freestalls were renovated a year ago. Other on-going renovation projects include new bins for research feeding, a new Data Ranger and Mixer Wagon and fully renovated heifer barn.



VISITORS

The Department was privileged to have numerous visitors who delivered presentations in the departmental seminar series and in classes. These presentations enhanced our offerings significantly. Visitors included: Terry Anderson, Leprino Foods; Brian Bonebright, Dairiconcepts; Mike

Cypher, Land O' Lakes; Tim Czmowski, Tetra Pak CPS; Lyle Kruse, MN Select Sires; Lucas Lentsch, Dairy Careers; Howard Manlove, Midwest Dairy Institute; Darrel Rennich, Select Sires; Amber Sperlich, Allen Safety; Todd Stahl, Hematech; Tim Weelborg, Enterprise Institute; Tom Wegner, Land O' Lakes; Walt Wosje. CWT program.



YEARS OF SERVICE

Jayne Raabe, Senior Secretary, was presented the Award of Recognition and Appreciation for 20 years of dedicated service to SDSU by the Career Service Advisory Council at their annual meeting. Jayne has been employed in the Dairy Science Department

since 1987. Her initial position in Dairy Science was as Staff Assistant. In 1990 she was promoted to Senior Secretary in Dairy Science and is currently in that position. In this position her responsibilities involve maintenance of departmental accounts, supervision of other secretaries in the department, and numerous other tasks and duties that include interaction with students, faculty, staff, parents and supporters. In 2004 she was recognized as Career Service Employee of the month.

OUTREACH

I-29 Dairy Conference

The Department in conjunction with the University of Minnesota, Iowa State University, and the University of Nebraska organized the 2nd annual dairy conference. Invited speakers discussed the challenges of milk production.

National Intercollegiate Dairy Challenge Contest

The Dairy Science Department and Iowa State University were co-hosts of the 2007 National Intercollegiate Dairy Challenge contest in Sioux Falls in February 2007. The contest attracted teams from approximately 30 universities from around the country. Several local dairies generously opened their facilities for the contestants.

Central Plains Dairy Expo

Alumni, students, staff, and faculty of the Dairy Science Department were involved in various activities of the 2007 Central Plains Dairy Expo. Dairy Club and staff assisted with registration and other duties. Faculty provided presentations on various topics and conducted a cheese tasting contest.

Dairy Day

The first annual Dairy Day was held in June 2007. Area dairy producers and friends of dairy science were invited to tour our facilities and view the recent remodeling of the dairy farm. Students, faculty and staff discussed recent research in dairy science and led tours of the facilities. SDSU ice cream and lunch were served.

K-12 STUDENTS

Dairy Camp

The Club hosted the 5th annual Dairy Camp in June for k-12 youth. This year there were 20 participants. Activities included a visit to a commercial dairy, training on care of heifers, reading pedigree, judging, visit to the SDSU dairy plant, making ice cream, clipping and showing cattle and entertainment.



High School Visits

Recruiting students for our programs is a year-round activity and a priority. Dairy Science Ag-Bio Ambassadors visited

several high schools throughout the year in South Dakota, Iowa and Minnesota. In addition, the Department visited schools in Lamberton, MN; Brandon, SD; Mitchell, SD; Harrisburg, SD; Upsala, MN; Brainerd, MN, Tyler, MN, Westbrook, MN, and Pipestone, MN. The Department also hosted 30 youth participants of the National Jersey Convention for an afternoon. Activities included visits to the dairy plant and farm.



EXTENSION

Meetings and Workshops: Aside from local extension workshops, Extension also participated in regional and international activities such as training in Honduras, and El Salvador, and presentations in Peru, Uruguay, Mexico, Minnesota, Wisconsin, Indiana, Iowa, and North Dakota.

Training Courses for Hispanics: Training workshops to obtain hygienic milk were offered to dairy workers. A special Dairy Spanish class "Spanish for Animal Scientists" was also offered to students in fall'07.

Dairy Science at World Dairy Expo: The Dairy Science Department and the South Dakota Department of Agriculture jointly displayed a booth at the World Dairy Expo in Madison, WI in October. The booth highlighted the dairy development efforts and dairy education and research activities and opportunities in South Dakota. Many interested people and alums stopped by to learn about the South Dakota dairy industry and education and to say hello.

Alums and Students: Visit the Careers Section of our website (<http://dairysci.sdstate.edu>) for a listing of job opportunities in Dairy Science. Please give us a call for details on positions that interest you.

Mark your calendar:

- The 2008 Dairy Science scholarship banquet is on 7th April at 6 pm at the SDSU Student Union.
- Dairy Day will be held on the SDSU campus in June. Date will be announced in spring.

Home Team Takes World Championship.



Glanbia Foods, Inc. is proud to be one of the largest American-style cheese and nutritional whey products producers in the US. We are a division of Glanbia, plc. an international food company headquartered in Kilkenny, Ireland. We are based in the southern Idaho communities of Twin Falls, Gooding and Richfield.

Proud sponsor of the Jackrabbit Dairy Review.

If you would like to hear more about our fast-paced, high-tech production environment, we invite you to visit our website at www.glanbiausa.com.



www.glanbiausa.com



SOUTH DAKOTA
STATE UNIVERSITY
Dairy Science Department

SDM 109, SDSU
Brookings, SD 57007

Change Service Requested

Non-Profit
Organization
U.S. Postage
PAID
Brookings, S.D.
Permit 24